E.W. Howell Co., LLC
113 Crossways Park Drive
Woodbury, NY 11797
Phone: 516-921-7100
Fax: 516-921-7920

REQUEST FOR INFORMATION
No. 00059

TITLE: Stainless Steel Flange

DATE: 4/19/2010

PROJECT: BNL CCWF-II

JOB:

TO: Attn: Alan Raphael
Brookhaven National Laboratory
Brookhaven Sciences Associates, LLC
Project Modernization Office
Upton, NY 11973-5000
Phone: 631-344-5854

STARTED:
COMPLETED:
REQUIRED: 4/26/2010

WORK IMPACT:	SCHEDULE IMPACT:	COST IMPACT:
Unknown	Unknown	Unknown

QUESTION:
4/19/2010
Stainless Steel Flange

We cannot find a vendor that has the stainless steel flange for the 42" condenser water pipe at the cooling tower sump discharge. As this piping has literally no pressure, we propose to fabricate a stainless steel plate 3/8" thick, and weld it to the stainless steel pipe. Please confirm that this substitution is acceptable.

CC: Bill Harrison, George Santorilla, File

PROPOSED SOLUTION: Not acceptable

42" SS flanges are not typically stocked and must be fabricated. Several manufacturers are capable of this. Two suggestions for your use!

ANSWER:

Rideal Forge & Fitting
6455 Wesco Way
Houston, TX 77041
713-896-4081
Contact: Terry

or

Shaw Stainless
899 Mountain Industrial Dr.
Marietta, Ga 30060
770-427-0402
Contact: Chris ext 107
or email chris@shawfab.us

Assure compatibility with US Pipe flange and AWWA C115.

Alan Raphael 4/20/10

Requested By: E.W. Howell Co., LLC **Date:** _____

Signed: _____
Lauren Bergin

UNITED STATES PIPE & FOUNDRY COMPANY
113 Town Place Square, #603
Jersey City, NJ 07310-1756
OFFICE (201) 484-7746 MOBILE (917) 364-4275 FAX (877) 202-1350
mweller@uspipe.com

April 30, 2009

Gilmour Supply Company Inc.
180 Marine Street
Farmingdale, NY 11735

RE: BNL

Gentleman:

This is to certify that United States Pipe and Foundry Company is a member of the Ductile Iron Pipe Research Association and that all pipe and fittings furnished for the subject project have been or will be manufactured in accordance with and met all applicable requirements of the following specifications and standards.

PIPE: TR Flex®, Ductile Iron, Grade 60-42-10 per ANSI/AWWA C151/A21.51-91, ANSI/AWWA C150/A21.50-91 and manufacturer's standard.

FITTINGS: TR Flex® per ANSI/AWWA C153/A21.53, ANSI/AWWA C110/A21.10-93 and manufacturer's standard.

JOINTS: TR Flex® per ANSI/AWWA C111/A21.11-90 and manufacturer's standard. Flanged per ANSI/AWWA C115.

COATINGS AND LININGS: Outside asphaltic coating per ANSI/AWWA C151/A21.51-91. Cement mortar lining, double thickness per ANSI/AWWA C104/A21.4-90. Fusion bonded epoxy per ANSI/AWWA C116/A21.16. Tnemec Pota-Pox® Plus, Series 37H.

Respectfully submitted,

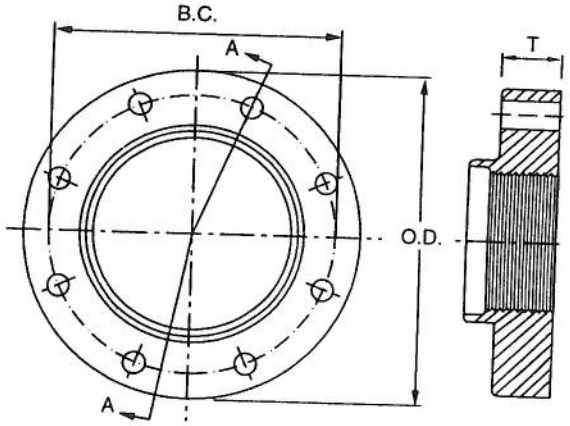
Michael T. Weller

Michael T. Weller
Sr. Sales Representative

Table 2 Solid gray- or ductile-iron flange dimensions

Nominal Pipe Size *in.*	OD *in.*	BC *in.*	T *in.*	Weight* One Flange Only *lb*	Bolt Hole Diameter *in.*	Bolt Diameter and Length† *in.*	Min. Length† Stud Bolts *in.*	Number of Bolts
3	7.50	6.00	0.75 ± 0.12	7	3/4	5/8 × 2 1/2	2 1/4	4
4	9.00	7.50	0.94 ± 0.12	11	3/4	5/8 × 3	2 1/2	8
6	11.00	9.50	1.00 ± 0.12	14	7/8	3/4 × 3 1/2	3	8
8	13.50	11.75	1.12 ± 0.12	27	7/8	3/4 × 3 1/2	3	8
10	16.00	14.25	1.19 ± 0.12	32	1	7/8 × 4	3 1/4	12
12	19.00	17.00	1.25 ± 0.12	47	1	7/8 × 4	3 1/4	12
14	21.00	18.75	1.38 ± 0.19	72	1 1/8	1 × 4 1/2	3 3/4	12
16	23.50	21.25	1.44 ± 0.19	90	1 1/8	1 × 4 1/2	3 3/4	16
18	25.00	22.75	1.56 ± 0.19	90	1 1/4	1 1/8 × 5	4 1/4	16
20	27.50	25.00	1.69 ± 0.19	115	1 1/4	1 1/8 × 5	4 1/4	20
24	32.00	29.50	1.88 ± 0.19	160	1 3/8	1 1/4 × 5 1/2	4 1/2	20
30	38.75	36.00	2.12 ± 0.25	240	1 3/8	1 1/4 × 6 1/2	5	28
36	46.00	42.75	2.38 ± 0.25	350	1 5/8	1 1/2 × 7	5 3/4	32
42	53.00	49.50	2.62 ± 0.25	500	1 5/8	1 1/2 × 7 1/2	6	36
48	59.50	56.00	2.75 ± 0.25	625	1 5/8	1 1/2 × 8	6 1/8	44
54	66.25	62.75	3.00 ± 0.25	670	2	1 3/4 × 8 1/2	6 7/8	44
60	73.00	69.25	3.12 ± 0.25	1,035	2	1 3/4 × 9	7	52
64‡	80.00	76.00	3.38 ± 0.25	1,510	2	1 3/4 × 9	7 1/4	52

Metric conversion: Dimensions: in. × 25.4 = mm; weight: lb × 0.4536 = kg.
*Flange weights shown are for information only. See Manufacturer's catalog.
†With maximum flange thicknesses and minimum-length bolts, bolt ends may be recessed as many as two threads short of nut faces. This condition has existed for several years. This is an acceptable condition and will not adversely affect the strength or serviceability of the joint. The Mechanical Engineering Design Handbook notes that engagement of only three threads is required; however, it is recommended that at least half of the threads of the nut be engaged.
‡The dimensions of 64 in. flanges correspond with applicable dimensions of 66 in. class E flanges in ANSI/AWWA C207 and 64 in. ductile-iron flanges can be connected to those flanges.



NOTE: Facing: Flanges are flat-faced and are fabricated smooth or with shallow serrations.
Back facing: Flanges may be back-faced or spot-faced for compliance with the flange thickness tolerances.
Flanges: The flanges are adequate for water service of 250 psi (1,720 kPa) or greater working pressure. The bolt circle and bolt holes of these flanges match those of ANSI/ASME B16.1, class 125 flanges and can be joined with class 125 flanges or with ASME/ANSI B16.5, class 150 flanges, none of which are compatible with ASME/ANSI B16.1, class 250 flanges (see foreword).

Figure 1 Solid flange details (see Table 2)